

# Package Sub-Station



We are authorized distributor of C & S make Electric package substations are for upto 24KV. The fully equipped Package Substation (PSS), comprises of outdoor duty enclosure, medium voltage switchgear, distribution transformer, low voltage panel & AFPCR panel (optional) is a state of art equipment for all your power distribution requirements.

The PSS assembled is completely self-contained package substation is a complete weather proof solution. It only requires to connect incoming and outgoing cables and hence the site work involved is an absolute minimum.

Each PSS contains three main equipments: Transformer, MV Switchgear and LV switchgear.

## Technical Details

- Rated Voltage: 12kV & 24 kV**

<b>Rated voltage</b>		12	24
		28	50
<b>Rated Insulation level</b>	kV rms,50 Hz 1 min.		
	kV impulse, 1.2/50 s	75	125
<b>Rated frequency</b>		50	50
<b>Rated current</b>		630	630
	kA rms – 1 s	21	16
<b>Max. allowable impulse current withstand</b>	kA peak	50	40
<b>Maximum LV Current</b>		3200	3200
<b>LV current withstand</b>		50/65	50/65
<b>Ambient temp.</b>	Normal operating condition	-5 °C to 45 °C	
		+50 °C or +60 °C	

## FEATURES

- Self-contained package substation
- All the equipment packed in a separate compartment
- All compartments are individually accessible
- Individual Door Operated lamp for illumination purpose
- Complete weather Proof solution
- Ready to position solution
- Four lifting eyes for ease of lifting
- Minimum site work

## **Details**

### **Enclosure Outdoor**

Enclosure outdoor body is made of Galvanized sheet steel in corrugated type design for proper heat dissipation. The enclosure is painted with epoxy based powder paint (colour-RAL 7032) suitable for outdoor installations. The compartments are provided with separate doors and pad locking arrangements. Each compartment is fitted with door operated lamp for illumination purpose. For safety purpose, the transformer compartment doors are fitted with arc reflectors.

### **The Medium Voltage (MV) switchgear compartment**

The Medium Voltage (MV) switchgear compartment is equipped with C&S make SF6 insulated Ring Main Unit. The GC is equipped with SF6 insulated sealed tank, Switch disconnectors and Vacuum circuit breakers. The ring main unit is designed and tested for internal Arc as per IEC 62271-200. The product conforms to IEC62271-1, IEC 62271-100, IEC 62271-103 and IEC 62271-200.

### **Distribution transformer**

The distribution transformer is equipped with professionally designed ventilation openings for air flow to keep transformer cool.

The compartment is provided with a pressure relief system integrated in the ceiling. An optional floor mesh is also provided to restrict the entry of small animals and other foreign objects. The compartment can accommodate both Oil immersed and Dry type transformers. The product conforms to IEC 2026 and IS 11171.

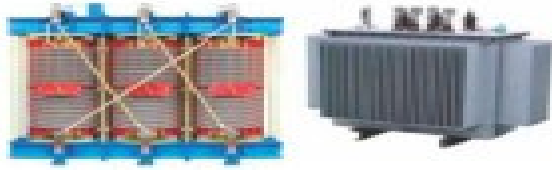
### **Low Voltage switchgear**

This compartment contains the Low Voltage Distribution Board (LVDB), which is fed from the secondary side of the transformer. The LVDB can be designed in different arrangements and configurations in order to suit any specific application. Busbars are provided for the phases and neutral suitable to the transformer secondary voltage and current ratings. A ground bus linked to the neutral bus is also provided.

The following equipment can be accommodate inside the panel;

1. Air Circuit Breaker (ACB's)
2. Moulded case circuit breakers (MCCB's)
3. LV Fuse switches / Fuse ways
4. Instrumentation and metering
5. APFC Panel (optional)





<b>Rated voltage</b>		<b>24</b>
<b>Rated Insulation level</b>	kV rms,50 Hz 1 min.	50
	kV impulse, 1.2/50 s	125
<b>Rated frequency</b>		50
<b>Rated current</b>		630

<b>Max. allowable impulse current withstand</b>	kA rms – 1 s	16
	kA peak	40
<b>Maximum LV Current</b>		3200
<b>LV current withstand</b>		50/65
<b>Ambient temp.</b>	Normal operating condition	-5 °C to 45 °C +50 °C or +60 °C

<b>Rated voltage</b>	kV	24
<b>Rated Insulation level</b>	kV rms,50 Hz 1 min.	50
	kV impulse, 1.2/50 s	125
<b>Rated frequency</b>		50
<b>Rated current</b>	Amp	630
<b>Max. allowable impulse current withstand</b>	kA rms – 1 s	16
	kA peak	40
<b>Maximum LV Current</b>	Amp	3200
<b>LV current withstand</b>	kV	50/65
	Normal	-5 °C to 45 °C

<b>Ambient temp.</b>	operating condition	+50 °C or +60 °C
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## Technical Details

<b>Rated voltage</b>	kV	12
<b>Rated Insulation level</b>	kV rms,50 Hz 1 min.	28
	kV impulse, 1.2/50 s	75
<b>Rated frequency</b>		50
<b>Rated current</b>	Amp	630
<b>Max. allowable impulse current withstand</b>	kA rms – 1 s	21
	kA peak	50
<b>Maximum LV Current</b>	Amp	3200
<b>LV current withstand</b>	kV	50/65
<b>Ambient temp.</b>	Normal	-5 °C to 45 °C
	operating condition	+50 °C or +60 °C